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HAGENS BERMAN

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Plaintiffs Cindy Codoni and Michelle Geer, individually and on behalf of all others similarly situated, bring this class action against Defendants Port of Seattle, Alaska Air Group, and Delta Air Lines, Inc. (collectively, "Defendants") seeking injunctive relief and/or damages for harm caused by Defendants' emission of dangerously high levels of pollutants that have contaminated communities surrounding Seattle-Tacoma International Airport ("Sea-Tac Airport") in violation of community members' rights under Washington negligence, nuisance, trespass, and/or inverse condemnation laws.

I. INTRODUCTION

- 1. Businesses and government agencies should not shower harmful pollutants on people's homes with impunity.
- 2. When planes take off and land from Sea-Tac Airport, the jet fuel they burn spews pollutants into the atmosphere. Particulate matter can also flake off from the bodies of the airplanes themselves during flight, further contaminating the surrounding environment.
- 3. Airplane activity generates a wide range of pollutants, including coarse, fine, and ultra-fine particulate matter; harmful gases including carbon monoxide, nitrogen dioxide, and sulfur oxide; hazardous air pollutants like formaldehyde, acrolein, 1,3-butadiene, naphthalene, benzene, acetaldehyde, and ethylbenzene; and toxic heavy metals including aluminum, barium, cadmium, copper, lead, magnesium, silver, uranium, and zinc. These pollutants settle over local communities, contaminating the air residents breathe and the soil where their children play. It is beyond dispute that these pollutants can cause respiratory problems (including asthma, chronic obstructive pulmonary disease, and pulmonary fibrosis) cardiovascular problems, central nervous system disorders, and Alzheimer's disease.
- 4. Pollution from airport activity is particularly acute in a five-mile radius of the Airport (the "Contamination Zone"). Nearly 300,000 people live within the Contamination Zone, over 60,000 of whom are children. The Contamination Zone, depicted in the map below, encompasses the cities of Burien, Des Moines, SeaTac, and Tukwila, among others:

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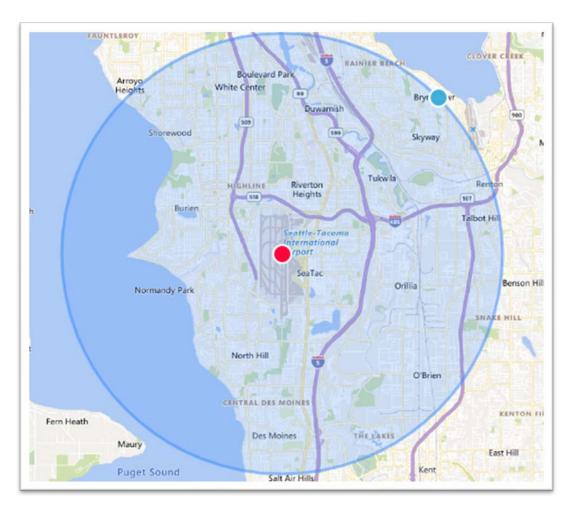
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Figure 1: Map of the Contamination Zone (5-mile radius from Sea-Tac Airport)



5. Predictably, residents within the Contamination Zone are now suffering the health consequences of breathing in Sea-Tac Airport-related pollution. Rates of cancer, heart disease, and chronic lower respiratory disease are significantly higher in the Contamination Zone than in other Seattle communities. Babies born in the Contamination Zone have a higher chance of being born prematurely or of being underweight. And residents of the Contamination Zone have lower life expectancies than those who live outside the Zone. In fact, researchers have concluded that exposure to airport-related pollution leads to hundreds of excess deaths in the Contamination Zone per year. And this pollution exposes class members to a heightened risk of disease.

6. Sea-Tac Airport-related pollution disproportionately affects low-income and minority communities. Over 30% of Contamination Zone residents live in households with total incomes under 200% of the federal poverty level; nearly 50% of children in the Contamination

Zone live in such households. The majority of residents in the Contamination Zone are Black, Hispanic, Asian, Native American, or Native Hawaiian/Pacific Islander (52%), whereas these minority communities make up only one-third of all individuals living in King County as a whole. And residents of the Contamination Zone are also more likely to be immigrants. The disproportionate impact of airport pollution on low-income and racially diverse communities is an issue of environmental justice; it is unlikely that Defendants' behavior would continue for long if the affected community was wealthy or politically powerful (as, for example, Seattle's Madison Park neighborhood or Medina). This disproportionate impact has been known to the Port.

- 7. Although knowledge by a defendant is not a requisite for any claim asserted in this action, at some point over the years of Sea-Tac Airport's operations, Defendants became aware that their actions were contaminating the Contamination Zone and making people sick and exposing them to a greater risk of disease than normal. But despite this knowledge, and despite pleas from local residents, Defendants have ignored the consequences of their actions and have not addressed the problem. Instead, they have carried on as usual, expanding operations at Sea-Tac and raking in profits at the expense of the health and the very lives of families living in the Contamination Zone.
- 8. People have the right—well recognized by the laws of trespass, nuisance, and negligence, and protected by Article I, Section 16 of the Washington Constitution—not to have Defendants dump pollutants all over their property with the assistance, permission and encouragement of a government agency. They are entitled to breathe clean air and live on uncontaminated land. They should not have to resign themselves to becoming sick and/or being unreasonably exposed to the risk of disease, or to watching their children become sick and/or be exposed to an increased risk of disease, to enable Defendants' commercial profits. Defendants' interests in avoiding the costs of cleanup, or in the case of the Port of Seattle, of avoiding the expense of formally acquiring additional land to act as a buffer zone between the community and the Airport, does not outweigh community members' interests in living safe, healthy lives.

Washington, where she has lived for the past 54 years. Ms. Codoni's home is within a five-mile

radius of Sea-Tac Airport, and thus is within the Contamination Zone.

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17. As a direct and proximate result of Defendants' actions, Ms. Codoni's property has been contaminated with dangerous levels of airport-generated pollution. This contamination has caused property damage and has unreasonably interfered with Ms. Codoni's quiet enjoyment of her property and exposes her to an increased risk of disease.

18. Ms. Codoni's property is almost permanently covered in a layer of black dust that she attributes to this pollution. This dust accumulates so quickly that Ms. Codoni regularly needs to wipe it off her car before driving.

Image 1: Soot-like deposits wiped off of Ms. Codoni's vehicle.



Images 2 and 3: Soot-like deposits on Ms. Codoni's vehicle.





19. Ms. Codoni also notes that, as the quantity of this black dust has increased in recent years, the trees on her property have withered and died. For most of her adult life, Ms. Codoni had been an avid gardener. However, since learning about the presence of dangerous levels of pollution in the Contamination Zone in 2022, Ms. Codoni has been worried about spending too much time outdoors and has abandoned this pursuit.

- 20. Ms. Codoni and her family have also suffered significant health issues that are tied, she believes, to airport pollution.
- 21. Ms. Codoni's father moved to the Contamination Zone in 1968. In 2010, he began having breathing issues and underwent surgery to restore some of his lung function. Then, later that same year, he was diagnosed with multiple myeloma. At the time he received his cancer diagnosis, Ms. Codoni's father was working as a security guard at the SeaTac Municipal Court courthouse, but his ill-health forced him into early retirement. He passed away from the cancer five years later.
- 22. Ms. Codoni's mother has lived in the Contamination Zone since 1968. Ten years after moving to the Contamination Zone, she was diagnosed with cervical cancer. Then, in the early 2000s, she was diagnosed with lymphoma. Ms. Codoni's mother survived both cancer diagnoses, but she has been in ill health ever since, suffering from strokes, heart failure, kidney failure, and dementia.

- 23. Ms. Codoni's oldest brother was born in the Contamination Zone and lived there most of his life. In April 2000, he was diagnosed with multiple myeloma. He died of this cancer less than a year later, on March 28, 2001, at the age of 51.
- 24. Ms. Codoni's second brother was born in the Contamination Zone and lived there most of his life. He had a chronic cough that began in childhood. He passed away in 2003 due to an illness that doctors were unable to diagnose.
- 25. Ms. Codoni's oldest sister was born in the Contamination Zone and has lived there for most of her life. She suffers from a chronic cough.
- 26. Ms. Codoni's second sister was born in the Contamination Zone and has lived there for most of her life. In 1981, she was diagnosed with cervical cancer. She is currently in remission.
- 27. Ms. Codoni's oldest son was born in the Contamination Zone and has lived there most of his life. He had regular asthma attacks as a child, and Ms. Codoni recalls that these attacks often required trips to the hospital emergency department.
- 28. Ms. Codoni's second son was born in the Contamination Zone and lived there most of his life. He passed away from liver disease in 2009, at the age of 32.
- 29. Ms. Codoni herself has also lived in the Contamination Zone most of her life. She was diagnosed with cervical cancer in 1979. She is currently in remission, but she suffers from a range of other illnesses including high blood pressure and chronic obstructive pulmonary disease (COPD).
- 30. Ms. Codoni believes that her health and her family's health problems are due to their exposure to Sea-Tac Airport-related pollution, and that as a result of Defendants' pollution she is unreasonably exposed to an elevated risk of disease. She also believes that Defendants should take responsibility for their actions and help prevent similar devastation among other families.

2. Michelle Geer

31. Plaintiff Michelle Geer is a resident of King County, Washington.

- 32. Ms. Geer and her husband own a home located at 16238 11th Avenue Southwest, in Burien, Washington, which they bought from Ms. Geer's mother-in-law in 2022. Ms. Geer's home is within a five-mile radius of Sea-Tac Airport, and thus is within the Contamination Zone.
- 33. Prior to purchasing the home located at 16238 11th Avenue Southwest, Ms. Geer had owned and lived in a number of other homes within the Contamination Zone.
- 34. The first house she purchased was located at 12236 23rd Avenue South, directly under the Sea-Tac Airport flight path. Every time a plane passed overhead, Ms. Geer and her husband could feel the entire house shake.
- 35. While she was living in this house, Ms. Geer became pregnant with her first child, a daughter, who was born with a hearing impairment but who seemed otherwise healthy. Then, on Thanksgiving morning in 1994, Ms. Geer's daughter began walking at an odd angle. Within a week, she had been diagnosed with medulloblastoma (a form of brain cancer). She passed away six months later of treatment-related complications, just a few weeks after her fifth birthday.
- 36. Ms. Geer now suspects that her own exposure to airport-generated pollution during her pregnancy may have contributed to her daughter's hearing impairment. She also suspects that her daughter's exposure as a young child to these same toxic heavy metals and other pollutants may have caused the cancer that ultimately ended her life; Ms. Geer recalls specifically that her daughter often played in the dirt in the front yard of the family's home.
- 37. Ms. Geer also has two surviving children. Since learning about the presence of dangerous levels of pollution in the Contamination Zone in 2022, she has become deeply concerned about the potential future health consequences they may suffer, given that both spent their entire childhoods in homes within the Contamination Zone.
- 38. Aside from her current home at 16238 11th Avenue Southwest, Ms. Geer also owns an apartment complex located at 800 South 216th St., in Des Moines, Washington. Ms. Geer has owned the complex since 2004. The complex, which is comprised of seven units and currently houses ten residents, is also within a five-mile radius of Sea-Tac Airport, and thus is within the Contamination Zone.

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	39.	As a direct and proximate result of Defendants' actions, Ms. Geer's property,
inclu	iding both	her home and her apartment complex, have been contaminated with dangerously
high	levels of	pollution. This contamination has caused property damage both at Ms. Geer's
hom	e and at tl	ne apartment complex she owns, and it has unreasonably interfered with her quiet
enjo	yment of	her property. Ms. Greer is also unreasonably exposed to an increased risk of
disea	ase.	

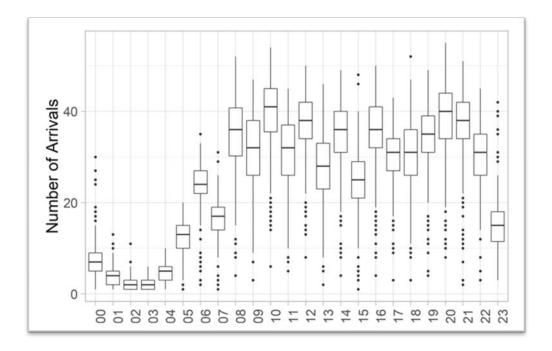
40. Ms. Geer believes that Defendants should take responsibility for their actions and should clean up the pollution they have caused.

B. Defendants

1. Port of Seattle

41. The Port is an agency of the State of Washington. The agency owns Sea-Tac Airport, which serves commercial air passengers, air cargo, general aviation, and aircraft maintenance on a site of approximately 2,800 acres. In 2021, the Airport served over 36 million passengers, and in 2022 it accommodated 198,655 total landings. The airport averages 23 landings per hour. The airport operates 24 hours per day, 7 days per week.

FIGURE 2: Number of flight arrivals per hour of day in 2018 at Sea-Tac Airport¹



- 42. Over the last decade, the Port has expanded its airport facilities and has allowed an increase in the number of total flights into and out of Sea-Tac Airport even as it has been aware of the impact of its operations on the residents of the Contaminated Zone.
- 43. The Port has the authority to grant airlines rights and privileges concerning the occupancy and use of Sea-Tac Airport. These rights and privileges are set out in five-year leases/operating agreements between the Port and the airlines.

2. Alaska Air Group

- 44. Defendant Alaska Air Group ("Alaska") is a multinational corporation organized and existing under the laws of Delaware, with its principal place of business located in Seattle, Washington. Alaska subsidiaries include Alaska Airlines, Inc. as well as Horizon Air Industries, Inc. Alaska is currently the fifth largest airline in the United States, with operating revenue of \$9.6 billion in 2022.
- 45. As of February 2023, Alaska's fleet consists of 289 commercial aircraft, including primarily Boeing 737-series jets as well as a few Airbus and Embraer jets.

¹ Env'tl & Occupational Health Sciences, Mobile ObserVations of Ultrafine Particles: The MOV-UP Study Report (Dec. 2019) at 26, https://deohs.washington.edu/sites/default/files/Mov-Up%20Report.pdf (hereafter the "MOV-UP Study").

46. Alaska has been operating out of Sea-Tac Airport since August of 1951. In 2020, Alaska operated a combined total of 160,714 flights into and out of Sea-Tac Airport, accounting for 56% of the total 287,114 flights the airport handled that year.

3. Delta Air Lines, Inc.

- 47. Defendant Delta Air Lines, Inc. ("Delta") is a multinational corporation organized and existing under the laws of Delaware, with its principal place of business located in Atlanta, Georgia. Delta is one of the largest publicly traded airlines by revenue; in 2022, Delta's total operating revenue was over \$50 billion.
- 48. In 2019, Delta operated 915 commercial aircraft. Its fleet consists largely of Airbus and Boeing jets, as well as a few Bombardier and Embraer jets. Delta has one of the oldest fleets of any United States airline, with an average fleet age of 14.8 years as of December 2022.
- 49. Delta has been operating out of Sea-Tac Airport since 1947. In 2020, Delta operated a combined total of 68,451 flights into and out of Sea-Tac Airport, accounting for approximately 24% of the total 287,114 flights the airport handled that year.
- 50. Defendants Alaska and Delta are referred to collectively as "Defendant Airlines." Together, Defendant Airlines operate nearly 80% of all flights into and out of Sea-Tac Airport.

IV. FACTUAL ALLEGATIONS

- A. Pollutants, including particulate matter, dangerous gases, hazardous air pollutants, and toxic heavy metals, are harmful to human health.
- 51. This case is about people who live in communities that are contaminated with dozens of pollutants that are the direct result of airport operations. The pollutants of most concern fall into four categories: (1) particulate matter, (2) dangerous gases, (3) hazardous air pollutants, and (4) toxic heavy metals. The negative health impacts of pollutants in each of these categories are described in the chart below.



AMENDED CLASS ACTION COMPLAINT - 12

POLLUTANT	HEALTH EFFECTS					
Particulate Matter						
Coarse particulate matter (diameters of	<u>Short-term exposure</u> : Respiratory problems (including asthma attacks), cardiovascular problems.					
2.5 to 10 μm)	<u>Long-term exposure</u> : Heart disease, stroke, pulmonary embolism.					
Fine particulate matter (diameters less than 2.5	Short-term exposure: Cardiovascular, respiratory, and cerebrovascular problems.					
μm)	Long-term exposure: Cancer and cancer-related deaths, nervous system problems, increased risk of pre-term births.					
Ultra-fine particulate	Short-term exposure: Nervous system problems.					
matter (diameters less than 0.1 μm)	Long-term exposure: Respiratory, cardiovascular, and central nervous system problems, Alzheimer's disease.					
Dangerous Gases						
Carbon monoxide	Short-term exposure: Cardiovascular problems.					
	Long-term exposure: Increased risk of cardiac-related death.					
Nitrogen dioxide	Short-term exposure: Trigger for asthma attacks.					
	Long-term exposure: Asthma, lung cancer, Type II diabetes, dementia, and Parkinson's Disease. Fetal exposure may be associated with autism spectrum disorder.					
Sulfur oxide	Short-term exposure: Respiratory problems.					
	<u>Long-term exposure</u> : Increase in the severity of asthma in children. Exposure may also contribute to respiratory-related death.					
Hazardous Air Pollutar	nts					
Formaldehyde	Short-term exposure: Eye, nose, and throat irritation.					
	<u>Long-term exposure</u> : Changes in lung function, lung cancer.					
Acrolein	Short-term exposure: Nose and throat irritation, as well as dizziness, nausea, and headache.					
	<u>Long-term exposure</u> : Lung cancer, congenital abnormalities.					
1, 3-butadiene	Short-term exposure: Coughing, wheezing, headache, dizziness, and lightheadedness.					
	<u>Long-term exposure</u> : Lymph and blood cancers.					
Naphthalene	Short-term exposure: Eye, nose, and throat irritation.					
	<u>Long-term exposure</u> : Vision damage, liver and kidney damage, anemia, cancer.					
Benzene	<u>Short-term exposure</u> : Dizziness, rapid heart rate, drowsiness, tremors, and confusion.					
	Long-term exposure: Anemia, leukemia.					
Acetaldehyde	Short-term exposure: Eye, skin, and respiratory tract irritation, increases in blood pressure.					

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POLLUTANT	HEALTH EFFECTS
	<u>Long-term exposure</u> : Symptoms resembling those of alcoholism, pulmonary edema.
Ethylbenzene	Short-term exposure: Respiratory tract and eye irritation, dizziness.
	<u>Long-term exposure</u> : Hearing and kidney damage.
Toxic Heavy Metals	
Aluminum	Short-term exposure: Irritation of respiratory tract, metal fume fever (symptoms include fever, chest tightness, muscle aches, headache, and cough).
	<u>Long-term exposure</u> : Impaired lung function pulmonary fibrosis, neurobehavioral problems.
Barium	Short-term exposure: Nose, throat, and lung irritation, barium poisoning (symptoms include nausea, vomiting, diarrhea, irregular heartbeat, muscle weakness, tremors, and paralysis; can be fatal).
Cadmium	Short-term exposure: Irritation of respiratory tract.
	<u>Long-term exposure</u> : Lung damage and lung cancer, kidney disease, decreased bone mineralization (increasing the risk of bone fractures).
Copper	<u>Short-term exposure</u> : Irritation of respiratory tract, metal fume fever.
	<u>Long-term exposure</u> : Lung damage, damage to reproductive organs.
Lead	Exposure to lead over any period of time is associated with toxicity to every organ system that has been studied.
	Exposure among adults: Decreased cognitive function, altered mood and behavior, renal problems, increased blood pressure, reproductive and fertility issues, cancer.
	Exposure among children: Cognitive impairment, behavioral problems, autism, developmental issues. Lead exposure during gestation and infancy may result in impaired neurological development, neurobehavioral deficits, low birth weights, and other health problems. There is no safe blood lead threshold for the adverse effects of lead on infant or child neurodevelopment.
Magnesium	Short-term exposure: Metal fume fever.
Silver	<u>Short-term exposure</u> : Breathing problems, stomach pains.
	<u>Long-term exposure</u> : Arygia (a condition in which a person's skin takes on a permanent blue-gray discoloration).
Uranium	Short-term exposure: Skin irritation and rash, cough, shortness of breath.
	<u>Long-term exposure</u> : Lung cancer, bone cancer, kidney disease, reproductive damage.
Zinc	Short-term exposure: Metal fume fever.
	<u>Long-term exposure</u> : Anemia, nervous system disorders, damage to the pancreas.

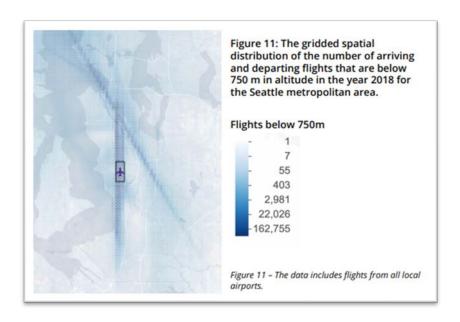
- 52. Notably, the health effects of exposure to these pollutants are cumulative. That is, exposure to two or more pollutants simultaneously may cause greater cell damage or other harm than exposure to each pollutant individually.
- B. Aircraft emit dangerous pollutants as they fly, and these pollutants accumulate in places where planes routinely fly below 3,000 feet.
- 53. Aircraft, including commercial jets of the type operated by Defendant Airlines, emit the dangerous pollutants described in Part IV(A) as they fly.²
- 54. A majority of these pollutants, including dangerous gases (such as carbon monoxide, nitrogen dioxide, and sulfur oxide), hazardous air pollutants (such as formaldehyde, acrolein, 1,3-butadiene, naphthalene, benzene, acetaldehyde, and ethylbenzene), and some heavy metals (such as barium) are expelled in aircraft exhaust.
- 55. In addition to aircraft exhaust, the bodies of aircraft themselves are also a source of pollution. The bodies of aircraft (called "fuselages") are constructed mostly of heavy metals. As a plane takes off and ascends to its cruising altitude, it experiences a drop in barometric pressure that causes the fuselage to expand. When the plane descends for landing, barometric pressure increases and the fuselage correspondingly contracts. This repeated expansion and contraction causes particulate matter—including aluminum, barium, cadmium, copper, lead, magnesium, silver, uranium, and zinc—to flake off the aircraft's body and to pollute the surrounding environment.
- 56. For most of the time airplanes are aloft, the pollutants they emit are dispersed by the wind, which can carry pollutants as far as 6,000 miles away from an airplane's route. This dispersion typically minimizes the buildup of pollutants in any one location.
- 57. However, when planes fly below 3,000 feet, there is not enough time for the wind to fully disperse the pollutants. Pollutants released below this altitude are sucked downwind and accumulate in local communities. This effect is magnified the closer an airplane flies to the

² Planes operated by non-Defendant airlines, as well as general aviation planes that fly in and out of Sea-Tac with the permission of the Port of Seattle, emit similar pollutants.



ground. As a result, airplane-generated pollutants become most concentrated in the areas directly surrounding airports, where aircraft fly the lowest.

58. This is precisely what has happened in the Contamination Zone. The following graphic, taken from a 2019 University of Washington report titled the Mobile ObserVations of Ultrafine Particles Study ("MOV-UP Study"), ³ illustrates the spatial distribution of planes that flew below 750 meters—approximately 2,500 feet—over the course of 2018 in the Seattle metropolitan area, clearly highlighting the large numbers of low over-flights in the Contamination Zone:



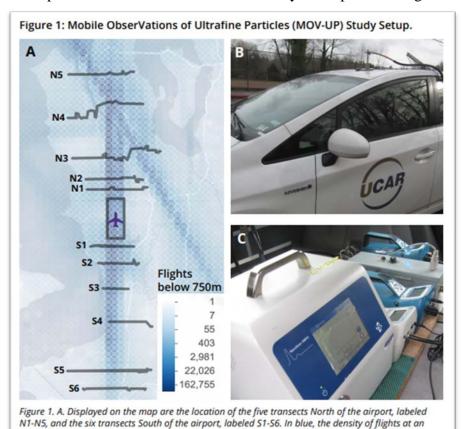
- 59. As aircraft (including Defendants' commercial jets), take off from and land at Sea-Tac Airport, they rain down pollutants on Contamination Zone communities from altitudes lower than 3,000 feet. Without time for the wind to disperse these contaminants, pollutants accumulate in ever-higher concentrations in the Contamination Zone.
- C. Defendant Airlines' operations, conducted with the consent and support of the Port of Seattle, have caused these pollutants to contaminate the Contamination Zone.
 - 1. Defendants' operations have contaminated the air in the Contamination Zone.
- 60. Significant evidence, including two University of Washington Studies, a report by Public Health Seattle & King County, and studies of contamination around other international

³ MOV-UP Study at 27.

airports, indicate that Defendant Airlines' operations have caused air pollution in the Contamination Zone.

a. The University of Washington's MOV-UP Study Confirms Adverse Pollution in the Contamination Zone.

- 61. The MOV-UP Study, published by researchers in the University of Washington's Environmental and Occupational Health Sciences Department, found that communities below aircraft flight paths, including communities in the Contamination Zone, are exposed to significant levels of ultrafine particulate matter air pollution.
- 62. The Study was a culmination of two years' worth of work, funded by Washington State. Researchers conducted air sampling seasonally from February 2018 through March 2019 using both mobile sampling and fixed-site sampling designs. Samples were taken from defined routes at fixed latitudes north and south of the airport (termed "transects" in the Study, as seen in the graphic below). All samples were taken during the afternoon to increase the comparability between repeat samples and to minimize the effect of daily atmospheric changes.



altitude of 750m or less is overlaid on the street map. B. Mobile platform with rooftop air inlet. C.



Sampling manifold and monitoring instruments.

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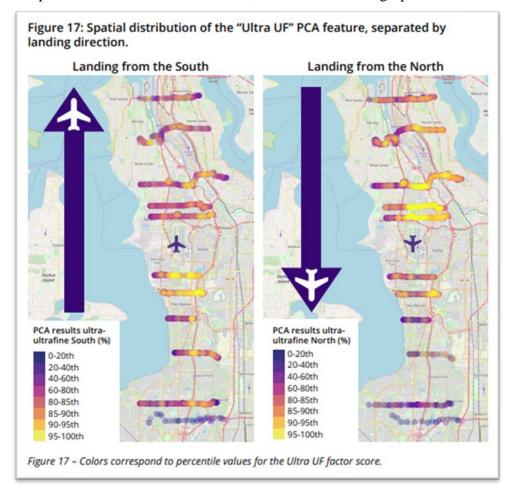
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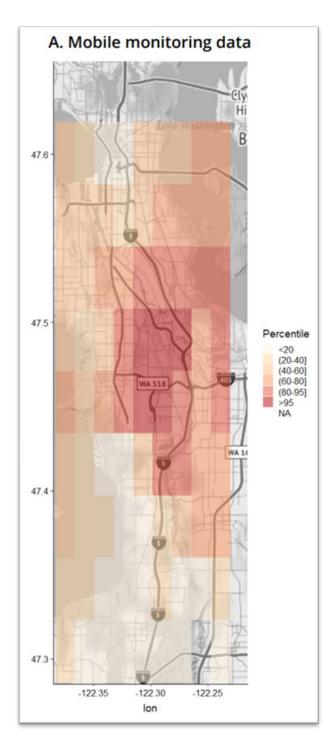
63. The results of this research indicate a close association between airplane landing paths and fine particulate matter contamination, as illustrated in the graphic below:



- 64. Based on these findings, the MOV-UP Study authors concluded that communities "underneath and downwind of landing aircraft"—which includes communities in the Contamination Zone—may be particularly at risk of exposure to particulate matter. ⁴ The Study's authors further noted that "those living within the area affected by landing aircraft emissions may be exposed to relatively higher concentrations of smaller sized ultra-UF particles" as a result of airplane activity.
- 65. A second diagram from the MOV-UP Study further illustrates the spatial distribution of ultrafine particulate matter recorded by the MOV-UP Study near Sea-Tac Airport,

⁴ MOV-UP Study at 38.

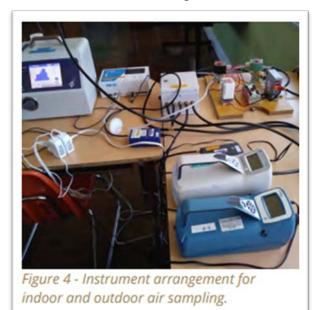
again highlighting the connection between aircraft activity and air pollution in Contamination Zone communities:



66. The MOV-UP Study findings support the conclusion that communities underneath and downwind of the flight path are exposed to aircraft-related particulate matter pollution.

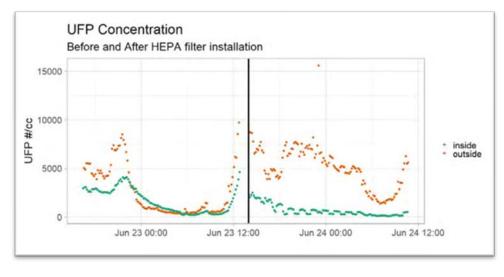
b. The "Healthy Air, Healthy Schools Study" Confirms Adverse Pollution in the Contamination Zone

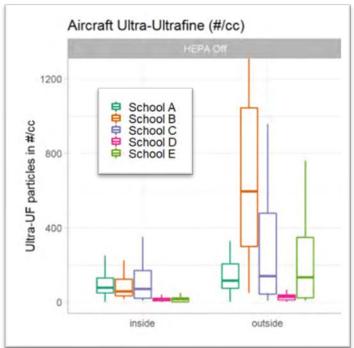
- 67. Motivated by the findings of the 2019 study, University of Washington researchers undertook another project, the Healthy Air, Health Schools Study (the "Schools Study") to measure infiltration of outdoor air pollution into indoor classroom spaces in five schools near Sea-Tac Airport.⁶ This study, too, found notable concentrations of pollution in the Contamination Zone.
- 68. University of Washington researchers visited each school twice, each time measuring concentrations of air pollutants both inside and outside the schools, the exchange of air between indoor and out outdoor air, the infiltration of outdoor particles into the schools, and the impact of portable air filters on concentration of pollutants.



69. As with the MOV-UP Study, the Schools Study found a significant concentration of fine particulate matter in the air outside Contamination Zone schools. Notably, the Schools Study also found that this outdoor pollution easily contaminates indoor air. The charts below summarize these findings:

⁶ Env'tl & Occupational Health Sciences, Healthy Air, Healthy Schools Study: Phase 1 Report: Report to the Washington State Legislature (Dec. 2021), https://deohs.washington.edu/sites/default/files/2021-12/Healthy-air-healthy-schools-phase1-report%20FINAL%20121521.pdf. Three of these schools are within the Contamination Zone. All schools are within 7.5 miles of Sea-Tac Airport and are within 0.5 miles of an active flight path serving Sea-Tac Airport.





c. The Public Health – Seattle & King County Report Confirms Adverse Pollution in the Contamination Zone

70. In 2019, alarmed by the MOV-UP Report, the Washington State legislature commissioned a study on the health impacts of Sea-Tac Airport on local communities. Public Health – Seattle & King County ("PHSKC") was charged with completing this study. On

⁷ Engrossed Substitute House Bill 1109 (Apr. 28, 2019), https://lawfilesext.leg.wa.gov/biennium/2019-20/Pdf/Bills/House%20Passed%20Legislature/1109-S.PL.pdf?q=20230319104325. House Bill 1109 appropriated \$150,000 for the Department of Commerce to "contract with a consultant to study the current and ongoing impacts of the SeaTac international airport." Sec. 129(30)(a). Specifically, the Washington State legislature requested information regarding "[t]he impacts that the current and ongoing airport operations have on quality of life" for individuals in impacted neighborhoods. Sec. 129(30)(b)(i).

- 71. Although the Public Health Report authors did not collect their own samples, the concluded, based on an analysis of over 500 reports and journal articles, that "[a]irport operations result in . . . air pollution," and that this pollution includes, specifically, "particulate matter of various sizes, ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur oxides (SO_x), and other hazardous air pollutants."
- 72. The Report also highlighted findings from a study of neighborhoods under the Boston Logan International Airport that outdoor pollutants penetrated indoors within minutes and that indoor and outdoor concentrations of these pollutants were similar (suggesting that penetration is substantial). In some cases, indoor concentrations were actually higher than those reported by area outdoor monitoring stations. Taken together with the findings from the Schools Study, it is therefore likely that residents within the Contamination Zone are exposed to pollutants inside their homes in nearly the same concentrations as outside.
 - 2. Defendants' operations have contaminated the soil in the Contamination Zone.
- 73. Studies of at least four international airports from around the world support the conclusion that communities that live directly adjacent to such airports—including people living in the Contamination Zone near Sea-Tac Airport—are heavily contaminated.
- 74. For instance, a study of Athens International Airport study found high concentrations of lead, copper, and zinc in the soil surrounding the airport. A study of the Boryspil International Airport found high levels of manganese, copper, lead, zinc, chromium,

¹⁰ Ioannis Massas et al., Distribution of Heavy Metals Concentrations in Soils Around the International Athens Airport (Greece): An Assessment on Preliminary Data, ResearchGate (May 2016).



⁸ Public Health – Seattle & King County, Community Health and Airport Operations Related Noise and Air Pollution: Report to the Legislature in Response to Washington State HOUSE BILL 1109 (Dec. 1, 2020), https://apps.leg.wa.gov/ReportsToTheLegislature/Home/GetPDF?fileName=Community%20Health%20and%20Air port%20Operations%20Related%20Pollution%20Report_c7389ae6-f956-40ef-98a7-f85a4fab1c59.pdf.

⁹ Public Health Report at i-ii. Other studies have also reached similar conclusions. For example, a recent literature review of peer reviewed literature on air quality near commercial airports concluded that "[t]hese studies consistently showed that ultrafine particulate matter (UFP) is elevated in and around airports." Karie Riley et al., *A Systematic Review of the Impact of Commercial Aircraft Activity on Air Quality Near Airports*, 11 City & Env't Interactions 100066 (2021).

and iron pollution in the soil near the airport as compared with background soil concentrations of these metals. ¹¹ And studies of the Delhi International Airport, ¹² as well as the Montreal Trudeau Airport, ¹³ similarly found high levels of soil contamination.

75. Upon information and belief, the soil surrounding Sea-Tac Airport is similarly contaminated with high concentrations of pollutants.

3. Nothing else can explain the pollutants in the Contamination Zone.

76. There is no other plausible explanation for the high concentrations of pollution in the Contamination Zone. Baseline studies of the Washington environment indicate low natural levels of the pollutants implicated here, ¹⁴ pointing to an anthropologic source of the pollution. And the MOV-UP Study specifically concluded that the types of fine-particulate matter that pollute the Contamination Zone cannot be attributed to roadway traffic, another main source of pollution in the Seattle area. Corroborating this conclusion, other researchers have concluded that airport emissions may have distinct "chemical fingerprints." ¹⁵

77. It is clear, based on the evidence from the University of Washington Reports, the Public Health Report, and other corroborating studies, that the high levels of pollution found in the Contamination Zone are a result of Sea-Tac Airport activity, and particularly aircraft activity. Because Defendant Airlines, with the permission of the Port, operate nearly 80% of all flights into and out of Sea-Tac Airport, they are responsible for the majority of the airport-related pollution. Furthermore, the Port, by virtue of its control over airlines' use of Sea-Tac Airport, is

¹⁵ See Katja M. Bendtsen et al., A Review of Health Effects Associated with Exposure to Jet Engine Emissions in and Around Airports, 20 Env'tl Health (Feb. 2021), https://ehjournal.biomedcentral.com/articles/10.1186/s12940-020-00690-y.



¹¹ Margaryta Radomska et al., *Environmental Pollution in the Airport Impact Area: Case Study of the Boryspil International Airport*, 5 Env'tl Problems 76, 79 (2020), https://dspace.nau.edu.ua/bitstream/NAU/44242/1/200453maket18-24.pdf.

¹² Sharmila Ray et al., *The Effect of Aircraft Traffic Emissions on the Soil Surface: Contamination Analysis Around the International Airport in Delhi, India*, 6 Asian J. Atmospheric Env't 118, 123 (2012).

¹³ Mayeesha F. Rahim et al., *Physicochemical Studies of Aerosols at Montreal Trudeau Airport: The Importance of Airborne nanoparticles Containing Metal Contaminants*, 246 Env'tl Pollution 734, 734 (Mar. 2019), https://www.sciencedirect.com/science/article/abs/pii/S0269749118335449.

¹⁴ See, e.g., Kenneth C. Ames & Edmund A. Prych, *Background Concentrations of Metals in Soils from Selected Regions in the State of Washington*, U.S. Geological Survey, Water-Resources Investigations Report 95-4018 (1995).

responsible for the contamination within the Contamination Zone from *all* airlines that operate at Sea-Tac Airport.

D. Plaintiffs and other Class and Subclass members have been harmed by Defendants' actions.

78. Defendants' actions have increased the health risks faced by Plaintiffs and Class members. Defendants' actions have also damaged Plaintiffs' and Subclass members' property by contaminating it with dangerous pollutants.

1. Defendants have increased the health risks faced by Plaintiffs and Class members.

- 79. The pollution caused by Defendants' operations is dangerous to Plaintiffs' and Class members' health, and Class members have suffered measurable health consequences as a result of exposure to this pollution.
- 80. The Public Health Report provides a particularly good summary of these known health consequences. ¹⁶ Overall, exposure to airport-related pollutants causes cancer and affects a range of organ systems, including an individual's cardiovascular, respiratory, reproductive, and central nervous systems. Exposure to these pollutants may also result in poor birth outcomes. The Report summarized these health effects in the following table:

Health outcomes likely caused or caused by airport operations—related pollutants based on evidence to date								
Organ System Noise Pollution Air Pollutants								
Cardiovascular	Causal	Causal						
Respiratory	Not examined	Causal						
Reproductive & fertility	Not examined	Causal						
Birth outcomes	No causal evidence	Likely causal						
Cancer	Not examined	Causal						
Central nervous system	Causal							
Metabolic system	No causal evidence	No causal evidence						

¹⁶ In addition to the health consequences reported in the Report, residents in the Contamination Zone are also likely prone to other illnesses identified in the Table included in Section IV(A).



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81. The Report offers more detailed summaries of health effects on people living in the Contamination Zone in a series of additional tables. (For each of the following, the Contamination Zone includes both "Zone A" and "Zone B" as defined in the Public Health Report.)

(a) People who live in the Contamination Zone are more likely to be hospitalized for asthma, chronic obstructive pulmonary disease (COPD), and heart disease than other King County residents:

		by Zone, ZUI	4-2018 average	10			
	Zone A: <1 mile from airport		Zone B: 1 to <5 miles from airport		Zone C: 5 to 10 miles from airport		Balance of County
Cause	Rate ¹	Count	Rate ¹	Count	Rate ²	Count	Rate ¹
Prevalence							
Has asthma now ²	5.6%*	1,300	8.2%	16,400	10.0%	46,600	8.3%
Ever had stroke ²	2.8%*	600	3.4%	6,900	3.1%	14,600	1.9%
Ever had heart attack ²	2.7%*	600	3.6%	7,100	3.4%	16,000	2.5%
Chronic obstructive pulmonary disesase ^{2,3}	2.9%*	700	4.8%	9,600	4.1%	19,300	3.3%
Diabetes ²	11.8%*	2,800	9.9%	19,800	8.2%	38,200	6.3%
Depression (school-age)	۸۸	۸۸	34.4%	N/A	33.5%	N/A	29.4%
Depression (adults) ²	11.3%*	2,600	20.5%	40,900	22.2%	103,600	21.5%
Hospitalization							
Asthma (adult)	۸۸	:00	28.4	۸۸	28.5	۸۸	16.6
Asthma (child)	۸۸		100.1	۸۸	86.8	۸۸	71.3
Cerebrovascular diseases (stroke) ⁴	304.8	17	270.3	413	241.9	981	213.0
COPD ^{3,4}	81.7	5	59.4	94	68.3	286	52.3
Diabetes ⁴	179.7	10	133.2	202	102.5	414	70.6
Diseases of the heart⁴	876.5	48	600.4	918	520.4	2,134	463.3

² Age 18 and older.

Higher than Balance of County

Lower than Balance of County

Not different from Balance of County

³COPD is chronic obstructive pulmonary disease.

^{*}Rates are age-adjusted.

^{*}Rate is unstable; use with caution.

^{^^}Data suppressed to meet confidentiality standard.

N/A: counts not available.

(b) Babies born in the Contamination Zone are more often premature and have lower birthweights than those born elsewhere in the County:

			k factors 4-2018 average				
	Zone A: <1 mile from airport		Zone B: 1 to <5 miles from airport		Zone C: 5 to 10 miles from airport		Balance of County
Indicator	Percent of live births	Count	Percent of live births	Count	Percent of live births	Count	Percent of live births
Early and adequate prenatal care ¹	63.9%	300	68.8%	2,367	71.1%	5,042	75.0%
Premature births (singleton) ²	9.8%	48	9.4%	334	8.2%	593	6.6%
Low birthweight (singleton) ³	5.8%	28	6.1%	217	5.5%	400	4.7%
² "Early and adequate prenatal care" ba ² A low birth weight is a weight at birth ³ A premature birth is a birth at less tha Higher than Balance of County Lower than Balance of County Not different from Balance of County	of less than 2	500g.	>= 80% of expe	ected prenati	al care visits).		

(c) People who live in the Contamination Zone have a shorter life expectancy at birth than other residents of King County:

		e expectancy at bi			
	Zone A: <1 mile from airport	Zone B: 1 to <5 miles from airport	Zone C: 5 to 10 miles from airport	Balance of County	
Indicator	Years	Years	Years	Years	
Life expectancy	77.9 79.4		81.2	82.9	
Lower than Ba	alance of County alance of County om Balance of Cour	ity			

(d) People who live in the Contamination Zone die more often of all causes than do other King County residents. In particular, they die more often from cancer, heart disease, and chronic lower respiratory diseases:

	Le	100000	ises of dea 4-2018 average				
	Zone A: <1 mile from airport		Zone B: 1 to <5 miles from airport		Zone C: 5 to 10 miles from airport		Balance of County
Cause Of Death	Rate ²	Count	Rate ²	Count	Rate ²	Count	Rate ²
All causes	808.6	248	723.4	1,901	639.1	3,950	572.2
Cancer	158.7	48	160.9	428	138.6	878	135.3
Diseases of heart	187.7	59	142.9	374	126.6	783	115.3
Alzheimer's disease	52.2	17	38.1	96	43.7	259	47.8
Accidents (Unintentional injuries)	45.8	14	39.1	106	35.7	222	30.4
Cerebrovascular diseases (stroke)	32.7	11	34.9	90	34.5	209	28.8
Chronic lower respiratory diseases	38.5	10	34.9	90	27.6	168	22.5
Diabetes mellitus	33.9	10	26.3	70	22.0	137	14.4
Intentional self-harm (suicide)	9.8	3	13.1	35	11.8	75	11.8
Chronic liver disease and cirrhosis	18.8	6	13.1	37	10.2	69	7.9
Influenza and pneumonia	14.3	4	13.5	35	10.0	61	8.6
Essential hypertension and hypertensive renal disease	10.9	4	10.6	28	9.1	55	6.8
Nephritis ³	۸۸	۸۸	8.6	22	6.6	41	4.6
Septicemia	7.0*	2	9.1	24	7.0	42	4.1
Assault (homicide)	6.6*	2	7.9	20	4.0	24	1.1
Certain conditions originating in the perinatal period	۸۸	۸۸	4.0	11	3.2	17	1.8

^IThe list of leading causes was developed by including any cause of death that is one of the 10 leading causes in any race group.

Lower than Balance of County than Balance of County
Not different from Balance of County

(e) Finally, communities within the Contamination Zone experience over 100 excess deaths per year on average as a result of their proximity to the airport:

² Rates are age-adjusted rates per 100,000 population.

³ Nephritis, nephrotic syndrome and nephrosis

^{*}Rate is unstable; use with caution.

^{^^}Data suppressed to protect confidentiality.

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Cause Of Death	Observed per year ²	Expected per year ³	Excess per year ⁴	Mortality ratio ⁵
Zone A: Less than 1 mile from airport	регуевг	per year	per year	Tatio
terani protesta protesta de la composición del composición de la composición del composición de la com	35	25	10	1.4
Cancer			10	
Diseases of heart	28	12	16	2.3
Alzheimer's disease	2	1	0	1.3
Accidents (Unintentional injuries)	12	7	5	1.8
Cerebrovascular diseases (stroke)	5	2	2	1.9
Zone B: 1 to less than 5 miles from airport				
Cancer	299	234	65	1.3
Diseases of heart	181	113	69	1.6
Alzheimer's disease	11	13	0	0.8
Accidents (Unintentional injuries)	82	58	24	1.4
Cerebrovascular diseases (stroke)	40	22	18	1.8
Zone C: 5 to 10 miles from airport				
Cancer	600	569	31	1.1
Diseases of heart	359	275	85	1.3
Alzheimer's disease	32	32	0	1.0
Accidents (Unintentional injuries)	170	138	32	1.2
Cerebrovascular diseases (stroke)	76	54	22	1.4
¹ Calculations exclude age 80 and older. See Apper ² Observed per year is the number of actual death: ³ Expected per year is the number of deaths that want of Balance of County. See Appendix A for details. ⁴ Excess per year is the number of observed death of Mortality ratio is the Zone's death rate divided by	s. vould have occured if the d s minus the number of exp	ected deaths. Num	bers may not tota	I due to round

82. The Public Health Report confirms that living in the Contamination Zone is dangerous and, in some cases, may even be deadly.

Not different from Balance of County

2. Defendants' actions have damaged Plaintiffs' and Subclass members' property by contaminating it with dangerous pollutants.

- 83. In addition to increasing Plaintiffs' and Class members' health risks, Defendants actions have caused property damage by contaminating all residential property in the Contamination Zone with harmful pollutants. In particular, Plaintiffs and other Subclass members who own their homes suffer a continual decline in the value of their property as Defendant Airlines, with the consent and support of the Port, dump more and more pollution onto their property.
- 84. It is widely recognized that pollution affects property values; homes in areas with less pollution command higher prices. ¹⁷ For example, one µg/m³ decline in particulate matter pollution results in a 0.4-0.5% increase in home values. ¹⁸ Conversely, an increase in pollution leads to lower prices. ¹⁹ Given the ever-increasing burden of pollution that contaminates Plaintiffs' and Subclass members' properties, the value of their property is continually in decline.
- E. Defendants knew or should have known that their activities were harming Plaintiffs and other Class members, and yet they continued to engage in these activities.
- 85. It is implausible that Defendant Airlines and the Port were unaware that their actions were harming Plaintiffs and other Class members. The MOV-UP Study has been publicly available since 2019. The Public Health Report has been publicly available since 2020. And the Schools Study has been publicly available since 2021. All Defendants are sophisticated entities that would have reason to keep abreast of scientific research regarding the impacts of airport and airplane pollution, and the MOV-UP Study in particular generated significant publicity that would have been hard for Defendants to miss. The following appeared in the Seattle Times:

¹⁷ See, e.g., Kenneth Y. Chay & Michael Greenstone, *Does Air Quality Matter? Evidence from the Housing Market*, 113 J. Pol. Econ. 376 (Apr. 2005); Ramesh Chandra Das, Tonmoy Chatterjee & Enrico Ivaldi, *Nexus Between Housing Prices and Magnitude of Pollution: Evidence from the Panel of Some High- and Low- Polluting Cities of the World*, 14 Sustainability 9283 (2022).

¹⁸ Chay & Greenstone, *supra* note 17, at 1.

¹⁹ See, e.g., id. One study of the impact of fine particulate matter pollution in residential areas in China recently concretized this concept, determining that every 1% increase in particulate matter causes an approximately 0.5% decrease in house prices. Wenhao Xue et al., *Are House Prices Affected by PM2.5 Pollution? Evidence from Beijing, China,* 19 Int'l J. Environ. Res. Public Health 8461 (July 2022).



86. Other news outlets, including KOMO News, KIRO 7 News, and FOX13 Seattle, have also run similar stories:

Sea-Tac Airport exposes communities to unique kind of pollution, UW study says

by Karina Mazhukhina | KOMO News | Sat, December 7th 2019, 2:14 PM PST





Communities near Sea-Tac
Airport exposed to unique mix
of air pollution, UW study finds





FOX13 Live Good Day Studio 13 Spotlight Weather Sports Contests More

UW study looks at 'unique' pollution around Sea-Tac Airport

By Jennifer Lee | Published December 5, 2019 | FOX13 News | Seattle & Western Washington | Formerly Q13 News | 🖈

- 87. At the very least, there is evidence that all Defendants knew of the Public Health Report's findings (and consequently of the MOV-UP Study findings as well) by mid-2021.
- 88. The Port must have learned of the Public Health Report by Spring 2021 because, on or about April 27, 2021, a consultant—Ramboll Group A/S—presented a review of the Public Health Report commissioned by the Port. ²⁰ The Port, of course, could not have commissioned Ramboll's review had it been unaware of the Public Health Report's existence. The Port therefore knew by the Spring of 2021 that its operations were contaminating the Contamination Zone, and that this contamination is harmful to human health.
- 89. Despite this knowledge, the Port did not act to prevent future contamination of the Contamination Zone. To the contrary, the Port forged ahead with the construction of a new International Arrivals Facility at Sea-Tac Airport, with plans to "more than double" international passenger capacity.²¹ The Facility opened in March 2022.²²
- 90. Defendant Airlines, for their part, must have learned of the Report on June 23, 2021, at the latest. On that date, the Seattle-Tacoma Airport Stakeholder Advisory Round Table held a Zoom meeting from 5:00 p.m. to 7:00 p.m. at which Dr. Kris Johnson, one of the authors of the Public Health Report, provided an overview of the Report's key findings. ²³
 Representatives from both Alaska and Delta—Randy Fiertz and Scott Ingham, respectively—were present at the meeting. ²⁴ Defendant Airlines therefore knew by the Summer of 2021 that their operations were contaminating the Contamination Zone, and that this contamination is harmful to human health.

 $^{^{20}}$ Complaint at \P 4.15, *Edmiston v. Port of Seattle*, No. 22-2-15797-6 SEA (King Cty. Super. Ct. Sept. 29, 2022).

²¹ Port of Seattle, Seattle-Tacoma International Airport International Arrivals Facility (Apr. 2021), https://www.portseattle.org/sites/default/files/2021-04/POS_2021-3_IAF_1Pager.pdf.

²² Port of Seattle, *SEA Airport Reveals Dramatic New International Arrivals Facility* (Mar. 3, 2022), https://www.portseattle.org/news/sea-airport-reveals-dramatic-new-international-arrivals-facility#:~:text= March% 203% 2C% 202022, leading% 20tourism% 20and% 20business% 20gateway.

 $^{^{23}\} StART,\ Meeting\ Summary\ (June\ 23,\ 2021),\ https://www.portseattle.org/sites/default/files/2021-07/StART-Meeting\ Summary-20210623.pdf.$

²⁴ *Id.* Randy Fiertz is the Director of Airport Affairs at Alaska Airlines. https://www.linkedin.com/in/randy-fiertz-48a6568 (last visited Apr. 18, 2023). Scott Ingham works as external government relations counsel to Delta Air Lines. https://www.linkedin.com/in/scottingham1 (last visited Apr. 18, 2023).

- 93. For example, early treatment of asthma can help prevent irreversible lung damage. Treating COPD, pulmonary fibrosis, heart failure, and cancers early in the course of disease progression can prolong survival, and, in the case of cancer, increase the chances of complete remission. Early intervention in the course of Parkinson's Disease and chronic kidney disease can result in a decrease in symptoms and slow the progression of these illness. Finally, access to prenatal care reduces preterm births and low birth weights.
- 94. But for people to benefit from early treatment for these diseases and health conditions, they must be diagnosed near the onset of their disease, which requires regular screening and medical monitoring by a trained healthcare professional.

²⁷ Marissa Nall, Delta Air Lines exec plans for spike in international traffic to Seattle, PUGET SOUND BUS. J. (Feb. 13, 2023), https://www.bizjournals.com/seattle/news/2023/02/13/delta-air-lines-joan-wang-international-flights.html.



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²⁵ Dominic Gates, *Despite Setbacks*, *Alaska Air Is Profitable*, *Plans to Hire and grow*, SEATTLE TIMES (Jan. 26, 2023), https://www.seattletimes.com/business/boeing-aerospace/alaska-reports-higher-profits-in-fourth-quarter-signaling-recovery.

²⁶ Delta News Hub, *At Delta's Seattle hub, a new experience for international travelers* (Mar 4., 2022), https://news.delta.com/deltas-seattle-hub-new-experience-international-travelers#:~:text=The%20450%2C000%20square%20foot%20facility,(up%20from%201%2C200%20today).

2. Decontaminating Plaintiffs' and Subclass members' property will require specialized equipment and skills.

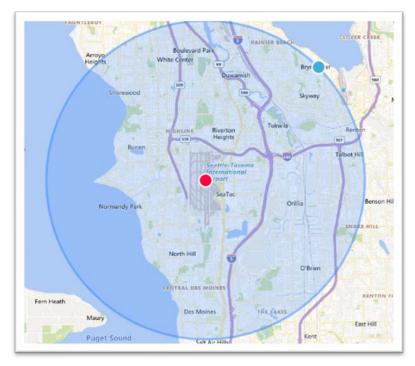
95. Rehabilitating an area that has been affected by pollutants including particulate matter, harmful gases, hazardous air pollutants, and toxic heavy metals is possible, but doing so requires specialized equipment and skills and can therefore be expensive. Methods for removing pollutants from the air include biofiltration, and methods for removing soil pollutants from a contaminated environment include chlorination, chemical extraction, electrokinetics, ion exchange, membrane separation, bioleaching, adsorption, and phytoremediation. This is not a case where Plaintiffs and other Subclass members can easily fix the problem by wiping down their homes with soap and water.

V. CLASS ACTION ALLEGATIONS

96. Plaintiffs bring this action pursuant to CR 23 of the Washington Rules of Civil Procedure on behalf of themselves and as a class action on behalf of the following Class and Subclass:

<u>Resident Class</u>: All current residents of the Contamination Zone as depicted in Figure 1.

<u>Homeowner and Renter Subclass</u>: All current renters and owners of residential real property located in the Contamination Zone as depicted in Figure 1, reprinted below:



- 97. Plaintiffs assert claims under the laws of Washington State as set forth below.
- 98. Excluded from the Class and Subclass are: (a) the officers and directors of the Defendants; (b) any judge or judicial officer assigned to this matter and their immediate family; (c) any legal representative, successor, or assign of any excluded persons or entities; (d) any Class counsel or their immediate family members; and (e) any State or any of its agencies.

A. All requirements of CR 23(a) are met.

- 99. A class action is warranted in this case because the Class and Subclass are so numerous that joinder of all members is impracticable; there are questions of law or fact common to the Class and Subclass; the claims of the representative parties are typical of the claims of the Class and Subclass; and the Plaintiffs named in this Complaint will fairly and adequately protect the interests of the Class and Subclass.
- 100. **Numerosity**: The members of the Class and Subclass are so numerous that individual joinder of all Class members is impracticable. For purposes of this Complaint, Plaintiffs allege that there are approximately 300,000 people who live in the Contamination Zone. The disposition of the claims asserted through this class action will enhance efficiency and will benefit the parties and the Court.
- 101. **Commonality**: The Class should be certified because the negligence claims asserted in this action are common to all members of the Class and individual complaints otherwise may result in inconsistent or varying adjudications. Similarly, the Subclass should be certified because the claims asserted in this action, including negligence, trespass, nuisance, and inverse condemnation, are common to all members of the Subclass and individual complaints otherwise may result in inconsistent or varying adjudications.
- 102. **Typicality**: Plaintiffs' claims are typical of the claims of the Class and Subclass because all claims arise from the same operative facts and are based on the same legal theories.
- 103. **Adequacy**: The Plaintiffs will fairly and adequately protect the interests of the Class and Subclass. Plaintiffs have retained competent counsel experienced in matters such as these. Plaintiffs and their counsel are committed to prosecuting this action vigorously on behalf

of the Class and Subclass and have the financial resources to do so. Neither Plaintiffs nor their counsel have interests adverse to those of the Class or Subclass.

B. All requirements of CR 23(b)(3) are met.

- 104. In addition to satisfying the prerequisites of CR 23(a), this case qualifies for class action treatment because questions of law or fact common to the Class and Subclass predominate over any questions affecting only individual Class members, and because a class action suit is a superior to other available methods for adjudicating the controversy.
- 105. **Predominance**: Questions of law or fact common to the Class and Subclass predominate in this case. These questions include, but are not limited to:
 - (a) Whether pollutants including particulate matter, harmful gases, hazardous air pollutants, and toxic heavy metals contaminate the air and soil in the Contamination Zone:
 - (b) Whether Defendants' operations have caused these pollutants to contaminate the air and soil in the Contamination Zone;
 - (c) Whether the measures Defendants have implemented to prevent the release of pollutants including particulate matter, harmful gases, hazardous air pollutants, and toxic heavy metals on Contamination Zone communities are effective and sufficient;
 - (d) Whether Defendant Airlines breached a duty of reasonable care in their operations by allowing pollutants including particulate matter, harmful gases, hazardous air pollutants, and toxic heavy metals to contaminate the air and soil in the Contamination Zone;
 - (e) Whether Defendant Airlines trespassed on Plaintiffs' and other Subclass members' properties intentionally or negligently;
 - (f) Whether Defendant Airlines created a nuisance with respect to Plaintiffs' and other Subclass members' properties by unreasonably interfering with their use and enjoyment of their respective properties;

1	(g) Whether Defendant Port of Seattle is liable for damaging or taking				
2	property belonging to Plaintiffs and other Class and Subclass members				
3	although the Port, itself, operates no aircraft;				
4	(h) Whether Plaintiffs and other Class and Subclass members are entitled to				
5	equitable relief, including, but not limited to, injunctive relief and medical				
6	monitoring; and				
7	(i) Whether Plaintiffs and other Class and Subclass members are entitled to				
8	damages and other monetary relief and, if so, in what amount.				
9	106. Superiority : A class action is superior to other available methods for the fair and				
10	efficient adjudication of this controversy. First, the expense and burden of litigation would				
11	substantially impair the ability of many Class and Subclass members to pursue individual cases				
12	to protect their rights. Absent class treatment, Plaintiffs and other Class and Subclass members				
13	will continue to suffer harm as a result of Defendants' unlawful and wrongful conduct. Second,				
14	Plaintiffs are unaware of any litigation concerning the controversy already commenced by other				
15	members of the Class or Subclass. <i>Third</i> , this Court is the proper forum for concentrating the				
16	litigation given that the harm affecting all Plaintiffs and Class and Subclass members occurred				
17	within this Court's jurisdiction. Finally, Plaintiffs do not expect that managing this class action				
18	will cause difficulties for the Court, particularly given this Court's experience managing other				
19	class actions.				
20	VI. CLAIMS				
21	A. Resident Class Claims				
22	COUNT ONE				
23	NEGLIGENCE				
24	(Alleged by Plaintiffs against Defendant Airlines on behalf of the Resident Class)				
25	107. Plaintiffs and the Class incorporate by reference all the foregoing allegations.				
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- 108. Defendant Airlines have breached their duty to exercise ordinary care, and that breach proximately caused Plaintiffs' and other Class members' increased risk of developing life-threatening illnesses.²⁸
- 109. A reasonably careful company exercising ordinary care would not shower pollutants on neighboring communities in quantities that pose serious health risks.
- 110. Defendant Airlines knew or should have known that their operations caused pollutants, including particulate matter, harmful gases, hazardous air pollutants, and toxic heavy metals, to rain down on and contaminate the neighborhoods surrounding Sea-Tac Airport.
- 111. Defendant Airlines also knew or should have known that these pollutants are hazardous to human health.
- 112. Despite this knowledge, Defendant Airlines continued acting in ways that caused pollutants to rain down on communities near Sea-Tac Airport in the Contamination Zone.
- 113. Defendant Airlines' decision to engage in activities that they knew or should have known would harm people living in the Contamination Zone constitutes a breach of Defendant Airlines' ordinary duty of care.
- 114. As a direct and proximate result of Defendant Airlines' breach, Plaintiffs and the Class have suffered injury. Plaintiffs' and Class members breathe air and come in contact with soil that is contaminated with pollutants as a direct consequence of Defendant Airlines' actions. No superseding cause breaks this chain of causation. Were it not for Defendant Airlines' negligent actions, Plaintiffs and other Class members would not have been exposed to this pollution, and they would not thereby be at an increased risk of developing life-threatening illnesses such as cancer and heart disease.

²⁸ See Ranger Ins. Co. v. Pierce Cty., 164 Wn.2d 545, 552–53, 192 P.3d 886 (2008) ("In an action for negligence a plaintiff must prove four basic elements: (1) the existence of a duty, (2) breach of that duty, (3) resulting injury, and (4) proximate cause.").



B. Homeowner and Renter Subclass Claims

COUNT TWO NEGLIGENCE

(Alleged by Plaintiffs against Defendant Airlines on behalf of the Homeowner and Renter Subclass)

- 115. Plaintiffs and the Subclass incorporate by reference all the foregoing allegations.
- 116. Defendant Airlines have breached their duty to exercise ordinary care, and that breach proximately caused Plaintiffs' and other Subclass members' property injuries.²⁹
- 117. A reasonably careful company exercising ordinary care would not shower pollutants on neighboring communities in quantities that cause property damage.
- 118. Defendant Airlines knew or should have known that their operations caused pollutants, including particulate matter, harmful gases, hazardous air pollutants, and toxic heavy metals, to rain down on and contaminate property in the neighborhoods surrounding Sea-Tac Airport.
- 119. Despite this knowledge, Defendant Airlines continued acting in ways that caused pollutants to rain down on communities near Sea-Tac Airport in the Contamination Zone.
- 120. Defendant Airlines' decision to engage in activities that they knew or should have known would harm property belonging to people living in the Contamination Zone constituted a breach of Defendant Airlines' ordinary duty of care.
- 121. As a direct and proximate result of Defendant Airlines' breach, Plaintiffs and the Subclass have suffered injury. Plaintiffs' and Subclass members' homes and other property are contaminated with pollutants as a direct consequence of Defendant Airlines' actions. No superseding cause breaks this chain of causation. Were it not for Defendant Airlines' negligent actions, Plaintiffs' and Subclass members' homes and property would not have been subject to this contamination.

²⁹ See Ranger Ins. Co., 164 Wn.2d at 552–53 ("In an action for negligence a plaintiff must prove four basic elements: (1) the existence of a duty, (2) breach of that duty, (3) resulting injury, and (4) proximate cause.").



COUNT THREE CONTINUING INTENTIONAL TRESPASS

(Alleged by Plaintiffs against Defendant Airlines on behalf of the Homeowner and Renter Subclass)

- 122. Plaintiffs and the Subclass incorporate by reference all the foregoing allegations.
- 123. Defendant Airlines have caused, and continue to cause, pollutants to enter onto real property owned or rented by Plaintiffs and Subclass members.³⁰ This trespass was intentional because Defendant Airlines knew that the entry of pollutants onto Plaintiffs' and Subclass members' property was certain, or substantially certain, to result from their operations. Despite this substantial certainty, Defendant Airlines still went ahead with their operations.³¹
- 124. Such intrusions re-occur many times each day as Defendant Airlines' aircraft headed to or leaving from Sea-Tac Airport fly over or near Plaintiffs' and Subclass members' property and cause pollutants to be deposited on that property.
- 125. Defendant Airlines knew that their operations caused pollutants to rain down on the neighborhoods surrounding Sea-Tac Airport, including the Contamination Zone. It was therefore reasonably foreseeable that their operations would disturb Plaintiffs' and Subclass members' possessory interests.
- 126. Defendant Airlines' trespass is without right or license and violates the exclusive property rights of Plaintiffs and Subclass members. The pollutants that Defendant Airlines cause to spread through the air and to contaminate Plaintiffs' and Subclass members' properties constitute an unreasonable interference with possessory use of their respective properties.
- 127. Defendant Airlines' intentional trespass has resulted in actual and substantial damages to the real property owned or rented by Plaintiffs and Subclass members because this property is now contaminated with pollutants in concentrations that are hazardous to human

 $^{^{31}}$ See Bradley v. Am. Smelting & Ref. Co., 104 Wn.2d 677, 709 P.3d 782 (1985) (quoting the Restatement (Second) of Torts, which says "The word 'intent' is used . . . to denote that the actor desires to cause consequences of his act, or that he believes that the consequences are substantially certain to result from it.").



³⁰ See Crystal Lotus Enters. Ltd. v. City of Shoreline, 167 Wn. App. 501, 506, 274 P.3d 1054 (2012) ("To establish intentional trespass, a plaintiff must show (1) invasion of property affecting an interest in exclusive possession, (2) an intentional act, (3) reasonable foreseeability the act would disturb the plaintiff's possessory interest, and (4) actual and substantial damages. . . . A cause of action for continuing intentional trespass (as opposed to permanent trespass) arises when an intrusive substance remains on a person's land, causes actual and substantial harm to that person's property, and is abatable.").

health. Abating this damage will require decontaminating Plaintiffs' and Subclass members' property through expensive cleanup efforts. **COUNT FOUR** PUBLIC NUISANCE (Alleged by Plaintiffs against Defendant Airlines on behalf of the Homeowner and Renter Subclass) Plaintiffs and the Subclass incorporate by reference all the foregoing allegations. 128. 129. Defendant Airlines' unlawful dispersal of pollutants onto Plaintiffs' and Subclass members' property constitutes a public nuisance as defined by Washington law.³² 130. Defendant Airlines have acted unlawfully by causing dangerous and harmful pollutants to be deposited on neighborhoods surrounding Sea-Tac Airport. As described above, Defendant Airlines' actions are unlawful because they are negligent and constitute trespass. 131. Defendant Airlines' unlawful acts have annoyed, injured, and endangered the comfort, repose, health, and safety of Plaintiffs and Subclass members. As a result of Defendant Airlines' actions, Plaintiffs and Subclass members now live in conditions where the surfaces of their property are contaminated, and the very air they breathe is full of pollutants that pose significant health risks. Defendant Airlines' unlawful actions have therefore rendered Plaintiffs and Subclass members insecure in life and in the use of their property. 132. Although Defendant Airlines' actions are a nuisance to anyone whose property is thereby polluted, these actions have been especially injurious to Plaintiffs and Subclass members who reside within the Contamination Zone. Defendant Airlines' actions have caused Plaintiffs' and Subclass members' properties to become extensively contaminated, resulting in significant health risks that are different in kind from the harm suffered by the public generally. 133. As a direct and proximate result of Defendant Airlines' actions, Plaintiffs and the Subclass have suffered injury. Plaintiffs' and Subclass members' homes and other property are all now contaminated with pollutants as a direct consequence of Defendant Airlines' actions. No

superseding cause breaks this chain of causation. Were it not for Defendant Airlines' actions,

³² RCWA §§ 7.48.010, 7.48.120 et seq.

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Plaintiffs' and Subclass members' homes and property would not have been subject to this contamination.

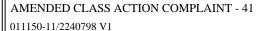
134. The balance of interests here is clear. Plaintiffs and other members of the Subclass have the right to live in safe homes. They have the right to breathe clean air and live on properties that are not heavily contaminated with pollutants rained down on them by large corporations. Plaintiffs and the Subclass should not have to resign themselves to watching their children become sick and die while Defendant Airlines rake in profits. Defendant Airlines' interests in avoiding the costs of cleanup does not outweigh the Plaintiffs' and other Subclass members' interests in living safe, healthy lives.

COUNT FIVE INVERSE CONDEMNATION

(Alleged by Plaintiffs against the Port on behalf of the Homeowner and Renter Subclass)

- 135. Plaintiffs and the Subclass incorporate by reference all the foregoing allegations.
- 136. Article I, Section 16 (Amendment 9) of the Washington Constitution requires the State to pay just compensation when taking or damaging property.
- To support operations at Sea-Tac, a public airport, the Port has permitted airlines, including Defendant Airlines, to operate in a manner that causes pollutants to be dumped on Plaintiffs' and Subclass members' private property.
- 138. The Port's actions have caused substantial damage to Plaintiffs' and Subclass members' property, which is now contaminated with airport-related pollutants.
- 139. Despite damaging Plaintiffs' and Subclass members' private property, the Port has not paid Plaintiffs and Subclass members just compensation. Nor has the Port instituted proceedings to formally acquire rights to the property through eminent domain. The Port's failure to pay just compensation or formally acquire rights to the property is a violation of the Washington Constitution.

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VII. REQUEST FOR RELIEF

WHEREFORE, Plaintiffs, individually and on behalf of the Class and Subclass, respectfully request judgment as follows:

- A. An Order certifying the Class and Subclass; designating Plaintiffs as representatives of the Class and Subclass and designating Plaintiffs' counsel as Class counsel; and requiring Defendants to pay the costs of notice to the Class and Subclass;
- B. An Order declaring that Defendant Airlines have (i) been negligent in their Sea-Tac Airport operations by engaging in activity that increases the risk of disease and death among all Class members; (ii) been additionally negligent in their Sea-Tac airport operations by engaging in activity that has damaged Subclass members' property; (ii) committed trespass by causing pollutants to enter onto the properties of Plaintiffs and other Subclass members; and (iii) created a nuisance by causing pollutants to contaminate neighborhoods near Sea-Tac Airport;
- C. An Order declaring that the Port has violated Article I, Section 16 (Amendment 9) of the Washington Constitution;
- D. An Order for injunctive relief and/or for damages against all three Defendants reflecting the cost to remediate Plaintiffs' and Subclass members' properties of the contamination caused by Defendant's conduct;
- E. An Order for monetary damages against Defendant Airlines sufficient to compensate Plaintiffs and Subclass members for the loss of the use and enjoyment of their properties caused by Defendant Airlines' conduct;
- F. An Order for injunctive relief against Defendant Airlines creating a Courtsupervised, Defendant-funded medical monitoring program which will:
 - (i) Establish a trust fund, in an amount to be determined, to pay for appropriate medical monitoring as frequently as necessary to facilitate the diagnosis of Class members with illnesses associated with exposure to airport-related pollution (including exposure to carbon monoxide, nitrogen dioxide, sulfur oxide, formaldehyde, acrolein, 1,3-butadiene, naphthalene, benzene,

1	acetaldehyde, ethylbenze	ne, aluminum, barium, cadmium, copper, lead,			
2	magnesium, silver, uranium, and zinc, as well as to fine, ultrafine, and ultra-				
3	ultrafine particulate matte	er);			
4	(ii) Notify all Class members, in writing, that they may require frequent medical				
5	monitoring for the purpos	ses of diagnosis; and			
6	(iii) Provide information to treating physicians to aid them in determining when a				
7	Class member is subjected to an increased risk of harm; and				
8	G. An Order for any further relief as this Court may deem just and proper.				
9	VIII. JURY DEMAND				
10	Plaintiffs hereby demand a trial by jury on any and all matters so triable.				
11					
12	DATED this 21st day of April, 2023.	Respectfully submitted,			
13		HAGENS BERMAN SOBOL SHAPIRO LLP			
14		By: /s/ Steve W. Berman			
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